GROUP (D)
EMERGENCY MODE
STUDENT STATION (EMS)

GROUP (C)
INSTRUCTOR STATION

GROUP (B)
INTEGRATED CATAPULT
CONTROL STUDENT STATION (ICCS)

GROUP(A)
CENTRAL CHARGING PANEL
STUDENT STATION (CCP)

TM-018-122-09

CATAPULT C-11 MAINTENANCE TRAINER, DEVICE 11F12

TRAINING CATEGORY:

    AVIATION (Aircraft Launching)

ORIGINATING AGENCY:

    DCNO/AIR

SECURITY CLASSIFICATION:

    Device 11F12 is unclassified.

PURPOSE OF DEVICE:

    To provide team training in normal and emergency modes for day and night carrier launches of various aircraft.

INTENDED USE:

    In AB School for classroom training of Boatswain Mate Equipment (ABE) personnel and catapult officer students.

FUNCTIONAL DESCRIPTION:

    The Catapult Launch System Trainer, Device 11F12, (Catapult Trainer) consists of simulated shipboard consoles and assemblies used in launching aircraft from Nimitz class aircraft carriers. The Catapult Trainer is divided into four (4) stations as shown.

    Operated from Instructor Station Group (C), the five (5) modes of operation listed below are computer-driven and used to carry out all training exercises.

1. Team Training Normal Mode. The ICCS Group (B) and CCP Group (A) are active with launch control at the ICCS.

2. Team Training Emergency Mode 1. The EMS Group (D) and CCP Group (A) are active with launch control at the EMS.

3. Team Training Emergency Mode 2. The EMS Group (D) and CCP Group (A) are active with launch control at the CCP.

4. Demonstration Mode. No student interaction is required.

5. Stand-alone Mode. Computer assisted instruction (CAI) lessons are provided for self-paced, individual instruction at four (4) major simulated consoles.

The Catapult Trainer also features a Daily Operational Readiness Test (DORT) for the instructor and a system diagnostic for the maintainer.

Under instructor control, motion scenes of aircraft launches are projected upon one of two large screens. In the normal mode, motion scenes are projected in the ICCS Group (B). In the emergency mode, motion scenes are projected in the EMS Station Group (D). The scenes are accompanied by launch sounds heard on the deck and those sounds heard in the CCP Group (A), below deck. The motion scenes are menu-selected by the instructor for specific aircraft (e.g., F/A-18, F-14) and other factors and conditions which would influence the launch. Each scene starts with the aircraft taxiing onto the shipboard catapult with the jet blast deflector rising behind it. The scene continues to play until it reaches the point at which the student should have taken action. If the student responds at his console correctly, the scene continues uninterrupted. If the student responds too late, the video freezes and the audio continues. If the student responds incorrectly, the video freezes and the sound is suspended. The video scene normally concludes with completion of the launch and the sound of the shuttle advance in the CCP Group (A). The training exercises require voice communication between students for team training. Faults may be simulated in the equipment during various launch phases as selected by the instructor. The Catapult Trainer is designed to enhance teamwork needed for a successful launch.

PHYSICAL INFORMATION:

The Catapult Trainer is enclosed in a climate controlled, four-room structure occupying a total area of 75 ft by 20 ft. with ceiling height of 15 ft.

EQUIPMENT REQUIRED (NOT SUPPLIED):

Twenty-five (25) GFE sound-powered phones.

POWER REQUIREMENTS:

208Y/120 VAC, 3 Phase, 60 Hz, 11.8KVA

PUBLICATIONS FURNISHED:

1. Operation & Maintenance Manual, NTSC P-5972 (U), P-5972-1 (U)

2. PMS Documentation, NTSC P-5973 (U)

3. Commercial Manuals, NTSC P-5974 (U)

4. Instructor's Utilization Handbook, NTSC P-5975 (U)

5. On-The-Job-Training Handbook, NTSC P-5976 (U)

PERSONNEL:

Instructor Operation: Naval Officer, grades 0-1 thru 0-3 and Aviation Boatswain Mate Equipment (ABE), grades E-6 and above.

Trainees: ABE personnel and selected officers

Maintenance: One (1) hour per 40-hour utilization week

CONTRACT IDENTIFICATION:

Manufactured by Harris Corp., Orlando, FL, under NAVTRASYSCEN Contract No. N61339-87-C-0113.

LOCAL STOCK NUMBER:

6930-LL-C00-5973